SYSTEM AND METHOD FOR MANAGING CACHABLE ENTITIES

ABSTRACT OF THE DISCLOSURE

A system and method for managing cachable entities
(i.e., entities stored in a cache and/or entities which may
be stored in a cache) in a data processing application. In
one aspect, a method for managing cachable entities
comprises the steps of analyzing program code to determine
if there is at least one statement which affects a
desirability of performing at least one cache transaction;
and performing the at least one cache transaction if it is
desired. In another aspect, a program analysis tool
statically analyzes program code to locate points where
object state changes occur, where objects are created and
where objects are deleted, and then generates regularized
dependencies at such points for and employing the
dependencies to invalidate dependent cached queries. Query
specific keys are generated to insert query results into and
retrieve query results from a dependency managed cache.
Regularized dependencies are generated at the object query
points and are attached to query results inserted into a
dependency managed cache, which facilitates consistency of
query results from the dependency managed cache.